AMENDMENTS TO THE CLAIMS

1. (Original) A method for retransmitting data between two sides including a reception side and a transmission side in a mobile communication system including one or more mobile stations and one or more radio networks, the method comprising the steps of:

a) at the reception side, storing data received from the transmission side in a first storage unit;

b) as a result of an error-checking procedure, if the data is erroneous, requesting the transmission side to retransmit the data;

c) at the transmission side, transmitting to the reception side first information related to retransmission and retransmitting the requested data;

d) at a combining unit at the reception side, combining the retransmitted data with the data stored in the first storage unit;

e) if the combined data is not erroneous, clearing the data and the retransmitted data from the first storage unit and transmitting the combined data to a first upper layer included in the reception side; and

f) in response to an ACK signal from the reception side representing that normal data has been received, clearing at the transmission side the retransmitted data from a second storage unit.

2. (Original) The method as recited in claim 1, wherein the first storage unit is included in a first physical layer included in the reception side.

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3. (Original) The method as recited in claim 1, wherein the second storage unit is included in a second upper layer included in the transmission side.

4. (Original) The method as recited in claim 1, wherein the step b) includes the steps of:

b1) performing the error-checking procedure by a cyclic redundancy check unit;

b2) if the data is erroneous, failing to transmit the data stored in the first storage unit to the first upper layer included in the reception side; and

b3) by the first upper layer, requesting the transmission side to retransmit the data by transmitting a NACK signal representing that desired data has not been received.

5. (Original) The method as recited in claim 4, wherein the NACK signal is generated at the first upper layer when the desired data has not been received during a predetermined time.

6. (Original) The method as recited in claim 4, wherein the NACK signal is generated at the first upper layer when other data, expected to be received after the desired data is received at the upper layer before the desired data.

7. (Original) The method as recited in claim 1, wherein the first information includes information about when the transmission side will retransmit the requested data to the reception side and information about a way of processing the requested data at the transmission

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side before retransmitting the requested data to the reception side, the way including how to establish a data coding rate and a puncturing.

8. (Original) The method as recited in claim 1, wherein the transmission side transmits the first information to the reception side before retransmitting the requested data.

9. (Original) The method as recited in claim 1, wherein the first information is transmitted as a first upper layer message.

10. (Original) The method as recited in claim 7, wherein the way of processing the requested data at the transmission side before retransmitting the requested data to the reception side is different from the way of processing the data at the transmission side before transmitting the data to the reception side.

11. (Original) The method as recited in claim 1, wherein the step b) further includes the steps of:

g) if the data is not erroneous, clearing the data from the first storage unit and transmitting the data to the first upper layer; and

h) generating the ACK signal in the first upper layer in response to reception of the data by the first upper layer.

12. (Original) The method as recited in claim 1, wherein the step e) further includes the step of:

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if the combined data is erroneous, returning to the step b).

13. (Original) A method for retransmitting data between two sides including a reception side and a transmission side in a mobile communication system including one or more mobile stations and one or more radio networks, the method comprising the steps of:

a) at the reception side, storing data received from the transmission side in a first storage unit;

b) as a result of an error-checking procedure, if the data is erroneous, requesting the transmission side to retransmit the data;

c) at the transmission side, retransmitting to the reception side the requested data and a transport format combination indicator (TFCI);

d) by a combination unit included in the reception side, combining the retransmitted data with the data stored in the first storage unit;

e) if the combined data are not erroneous, clearing the data and the retransmitted data from the first storage unit and transmitting the combined data to a first upper layer included in the reception side; and

f) in response to an ACK signal from the reception side representing that normal data has been received, clearing the retransmitted data from a second storage unit at the transmission side.

14. (Currently amended) The method as recited in claim 13, ~~12,~~ wherein it is determined if the reception side is receiving the retransmitted data by interpreting the transport format combination indicator (TFCI).

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15. (Currently amended) The method as recited in claim 14, ~~13,~~ wherein if it is determined that the reception side is receiving the retransmitted data by interpreting the transport format combination indicator (TFCI), the step d) is performed.

16. (Original) Computer-readable record media storing instructions for performing a method for retransmitting data between two sides including a reception side and a transmission side in a mobile communication system including one or more mobile stations and one or more radio networks, the method comprising the steps of:

a) at the reception side, storing data received from the transmission side in a first storage unit;

b) as a result of an error-checking procedure, if the data is erroneous, requesting the transmission side to retransmit the data;

c) at the transmission side, transmitting to the reception side a first information related to retransmission and retransmitting the requested data;

d) at a combining unit at the reception side, combining the retransmitted data with the data stored in the first storage unit;

e) if the combined data is not erroneous, clearing the data and the retransmitted data from the first storage unit and transmitting the combined data to a first upper layer included in the reception side; and

f) in response to an ACK signal from the reception side representing that normal data has been received, clearing at the transmission side the retransmitted data from a second storage unit.

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17. (Original) Computer-readable record media storing instructions for performing a method for retransmitting data between two sides including a reception side and a transmission side in a mobile communication system including one or more mobile stations and one or more radio networks, the method comprising the steps of:

a) at the reception side, storing data received from the transmission side in a first storage unit;

b) as a result of an error-checking procedure, if the data is erroneous, requesting the transmission side to retransmit the data;

c) at the transmission side, retransmitting to the reception side the requested data and a transport format combination indicator (TFCI);

d) by a combination unit included in the reception side, combining the retransmitted data with the data stored in the first storage unit;

e) if the combined data are not erroneous, clearing the data and the retransmitted data from the first storage unit and transmitting the combined data to a first upper layer included in the reception side; and

f) in response to an ACK signal from the reception side representing that normal data has been received, clearing the retransmitted data from a second storage unit at the transmission side.

18. (New) The method of claim 1, wherein transmitting the combined data to a first upper layer included in the reception side comprises transmitting the combined data to a data reception unit of the first upper layer for transmission in turn of the combined data to an asynchronous core network.

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19. (New) The method of claim 1, wherein transmitting the combined data to a first upper layer included in the reception side comprises transmitting the combined data to a data reception unit of the first upper layer for transmission in turn of the combined data to an application part that communicates with the first upper layer.

20. (New) The method of claim 14, wherein interpreting the TFCI occurs at a physical layer without support from any other layers to interpret the TFCI.

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